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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,664	04/01/2004	Robert C. Otterson	1360-001/ddh	1040

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EXAMINER

PATEL, RITA RAMESH

ART UNIT

PAPER NUMBER

1746

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/816,664

Applicant(s)

OTTERSON, ROBERT C.

Examiner

Rita R. Patel

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/1/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15, drawn to an apparatus for cleaning a surface, classified in class 134, subclass 172.
- II. Claims 16-20, drawn to a method of washing a surface, classified in class 134, subclass 34.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another apparatus such as one without a rotary valve mounted to the chassis.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Douglas Hancock on 5/16/06 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-15.

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Affirmation of this election must be made by applicant in replying to this Office action.

Claims 16-20 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

The drawings received 04/01/04 are acceptable for examination purposes.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chayer (US Patent No. 5,029,758) and further in view of Straiton (US Patent No. 5,898,970).

Chayer teaches a portable car wash system that includes a push cart 20 mounted on wheels 22 and contains a water supply tank 42, an engine 40, and low- and high-pressure pumps 50 and 52. The engine drives the pumps. The low-pressure pump pumps water out of the tank and the high-pressure pump boosts the pressure of the water. The high-pressure water is delivered to a wand 12 via a hose 16 attached to a hose reel 48. The wand includes a positionable head 13 that can be aimed to direct a high-pressure spray 224 from a nozzle 208. Also, a spray shield 210 reduces overspray

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from the nozzle (Abstract). The water supply tank includes an opening 70 and a cap 72 (col. 5, lines 55-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide said invention with multiple cleaning wands to provide increased outlets usable for cleaning; more than one user may thus operate the apparatus at any give time, also, one user may operably use multiple wands at the same time, that are directionally oriented in any angular direction towards the surface for achieving improved cleaning. It is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 124 USPQ 378 (CCPA 1960).

Although Chayer fails to specifically disclose use of a rotary valve in said invention, it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate a rotary valve with the cleaning wand in Chayer, as taught by Straiton to achieve adjustable fluid spray therein for cleaning surfaces; it is commonly known to use rotary valves for achieving said functions in the art of cleaning surfaces using pressurized spray nozzles as demonstrated herein. Straiton teaches a surface cleaner with a water-blast nozzle 5 positioned on a cleaning enclosure 1 to direct a high-pressure and low-volume jet stream of water 36, 37 at an attitude onto a surface 4 being cleaned. Depicted in Figures 3 and 6 of Straiton is a spray adjustor such as a nozzle plug 35 for adjusting pressure and area of a water jet emerging form the outlet orifice 8. Other types of spray adjustors are foreseeable. This one is similar in principle to some conventional garden-hose spray nozzles or water pressure cleaner systems which utilize fan or rotary spray nozzles. It adjusts water blast between a high-pressure

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spray 36 over a broad area and a coarse-flow spray 37 over a smaller area within the cleaning enclosure 1. The variable area of water spray provided by nozzle plug 35 works independently of the force valve 21 which adjusts the suction force in the open interior volume of the cleaning enclosure 1 against the intended surface to be cleaned 4 (col. 4, lines 64-67; col. 5, lines 1-8).

Straiton teaches that the rotary spray results in liquid sprayed over a broad area and Chayer teaches that the cleaning spray wand may be angularly adjustable by user along any of a 360° path; in Chayer the spray nozzle 208 is connected to an end of a flexible neck 206. The nozzle discharges the high-pressure water from the hose 16 as a high-pressure spray 224. The head 13 of the wand 12 is positionable. This feature is made possible by the combination of the flexible neck 206 and locking member 204. The rod 212 of the locking member 204 is pivotally connected to the base 216 of the spray shield 210. The other end of the rod 212 is connected to the locking ring 214. The locking ring 214 is placed over the handle 200. By moving the locking ring 214 to a desired position on the handle 200, the water spray from the nozzle 208 can be aimed in a particular direction (col. 7, lines 19-22, 41-48, and 62-64); which reads on applicant's limitations wherein the nozzle may be caused to rotate in a circular pattern. In turn, the spray shield 210 taught by Chayer is capable of occluding fluid flow about the 360° path.

Applicant's claim for a first valve is taught by Straiton's teaching of an air control valve 21; applicant's claim for a second valve is taught by Straiton's teaching of valve 24; desired balance of vacuum in the cleaning enclosure can be provided by vacuum

control means. A preferred means for maintaining vacuum pressure is a hand-operative air control valve 21 in an orifice 22. Decrease of opening area of the hand-operative valve increases vacuum pressure tightness of sealing with the surface seal 14.

Conversely, increase of opening area of the hand-operative air control valve 21 decreases vacuum pressure and subsequent tightness of sealing with the surface seal 14. The vacuum control orifice 22 can be in an appropriate portion of the cleaning enclosure that is not occupied by the water-blast nozzle 5 as shown in Figures 1-2 and 4-5. The valve 24 on the vacuum tube assembly handle provides a means to turn high pressure water passing through the tube 12 on and off during the cleaning process.

Once high pressure water is exiting the nozzle 7 within the cleaning enclosure 1, the only remaining adjustment is to set the proper balance between the vacuum or suction within the bottom portion 2 of the head assembly 1 and the ease of movement across the intended surface to be cleaned 4. The latter is accomplished preferably through the air control valve 21, which is initially set in the closed position. The valve 21 is manually opened allowing ambient air to enter the bottom portion 2 of the head assembly 1, resulting in less vacuum pressure being exerted against the surface 4, making it easier to move the contact gasket 14 across the surface 4. As wastewater is vacuumed and transported to the tank 11, the submersible pump within the tank 11 transports the wastewater to an external drain through line 20. The operation is continued until the surface is cleaned. Different surfaces may require a different balance of vacuum pressure which can be adjusted by opening or closing the manual valve 21 as necessary (col. 4, lines 13-23; col. 5, lines 19-38). It would have been obvious to one of

ordinary skill in the art at the time of the invention to use such first and second valves in Chayer to provide such fluid flow disclosed above, as shown by Straiton, with expectation of controllable fluid pathways therethrough for achieving optimal cleaning as required by the surface to be cleaned. This results in increased usability and convenience to user in terms of controlling fluid flow, in addition to providing environmentally viable options of operations which minimize the waste of fluid used therein. Air control valve 21 and valve 24 of Straiton may both be in a second position whereby water is directed through the high pressure outlet of the second valve.

Chayer's teaching of a pressure relief valve reads on applicant's claim for a pressure regulating valve; turning now to Figure 2, in accordance with the preferred embodiment of the invention, the water delivery system 44 comprises: a low-pressure pump 50; a high-pressure pump 52; and, a pressure relief valve 54 (col. 4, lines 39, 44-48).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RRP



MICHAEL BARR
SUPERVISORY PATENT EXAMINER